

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Westmoreland Resources, Inc.
PO Box 449
Hardin, MT 59034
2. Type of action: Application For Beneficial Water Use Permit
42KJ-30049086
3. Water source name: Groundwater (Fox Hills Aquifer)
4. Location affected by project: The place of use is the Absaloka Mine in Big Horn county. The point of diversion is a 1,494-ft deep well in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, Township 1N, Range 37E, Big Horn county.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This application proposes to withdraw water from the Fox Hills aquifer for a potable water source and industrial uses at the Absaloka Mine in Big Horn County. One 1,494-ft deep well was drilled at the mine location in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, Township 1N, Range 37E. The well was tested at an average rate of 12 gpm; however, by lowering the pump within the water column the log-term requested rate of 20 gpm appears to be achievable. Water is to be diverted and used year round (January 1 to December 31). Currently, the Absaloka Mine employs approximately 175 individuals and mines approximately 7.5 million tons of coal annually.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Department of Environmental Quality Website – TMDL 303d Listing
Montana National Heritage Program Website – Species of Concern
United States Fish and Wildlife Website – National Wetland Inventory
Montana Department of Fish Wildlife and Parks – Dewatering Concern Areas
Montana Bureau of Mines and Geology – Geologic Map, Hardin 30'x60' Quadrangle

Part II. Environmental Review

1. Environmental Impact Checklist:

<p>PHYSICAL ENVIRONMENT</p>

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No impact

The source is groundwater within the Fox Hills aquifer and stream depletion has been estimated at a maximum 0.04 cfs . Within the area of affect the Yellowstone River is not listed by the Montana DFWP as chronically or periodically dewatered stream.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No impact

Yellowstone River (Big Horn to Cartersville Diversion Dam) is listed on the Montana DEQ website, Clean Water Act Information Center. Warm Water Fisheries have been impaired due to flow modification. No significant effects to water quality are anticipated due to the nature of the proposed appropriation. Stream depletion within the Yellowstone River may be approximately 0.04 cfs.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No impact

The proposed appropriation is located within the Fox Hills aquifer. The aquifer is a bedrock aquifer and is typically considered to be hydraulically connected of the Lance/Hell Creek aquifer system. No other water users were identified as obtaining water from this aquifer system within the zone of influence identified. The closest groundwater user identified to draw water from this deep aquifer system is 18 miles from the proposed point of diversion. After 5 years of pumping the drawdown at this well is projected to be less than .01 feet. Depletion of the Yellowstone River has been projected to be up to 0.04 cfs.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: No impact

The well was installed by Ron Askins Drilling of Miles City, MT, a licensed well drilling company, per Title 37, Chapter 43 MCA and Title 36, Chapter 21 ARM.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: No impact

The Montana Natural Heritage Program website did not show any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern” that could be impacted by the proposed project.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: Minor impact

The National Wetlands Inventory (NWI) map is available in the vicinity of this proposed project. Areas near the project location at the Absaloka Mine have been mapped as freshwater pond, freshwater forested/shrub, and freshwater emergent. Well construction has been completed outside of the wetland areas boundaries; thus, no significant impact is expected related to this groundwater development.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: Not Applicable

No impact is expected to occur to any ponds due to the depth of the source aquifer.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: No impact

Groundwater is being diverted from Cretaceous-aged interbedded sandstone, sandy shale, and siltstone. Water will be pumped to a treatment plant and stored in a storage tank. Water is to be used for a potable water source and industrial purposes, including wash down water and make up water for boilers and steam cleaners. As such, the proposed appropriation will not alter soil quality, stability or moisture content.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: No impact

Typical short term construction activities associated with well construction may cause short-term disturbances to vegetation cover. It is the responsibility of the property owner to control noxious weeds on their property.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: NA-project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: No impacts not already assessed.

<h2>HUMAN ENVIRONMENT</h2>

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: No impact

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: No impact

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: Positive impact

Project provides new sanitary water supply system with increased efficiency and reliability.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination:

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- | | |
|---|-----------|
| (a) <u>Cultural uniqueness and diversity?</u> | None |
| (b) <u>Local and state tax base and tax revenues?</u> | None |
| (c) <u>Existing land uses?</u> | None |
| (d) <u>Quantity and distribution of employment?</u> | None |
| (e) <u>Distribution and density of population and housing?</u> | None |
| (f) <u>Demands for government services?</u> | None |
| (g) <u>Industrial and commercial activity?</u> | None |
| (h) <u>Utilities?</u> | None |
| (i) <u>Transportation?</u> | None |
| (j) <u>Safety?</u> | Increased |
| (k) <u>Other appropriate social and economic circumstances?</u> | None |

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified

Cumulative Impacts: None identified

3. *Describe any mitigation/stipulation measures:*

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*

PART III. Conclusion

1. Preferred Alternative

None

2 Comments and Responses

None

3. Finding:

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for this proposed action because no significant impacts have been identified as a result of the proposed action.

Name of person(s) responsible for preparation of EA:

Name: Brad Bennett

Title: Hydrologist/Specialist

Date: October 24, 2011